CANADIAN ARCHITECT AND BUILDER.

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—THE—

CANADIAN ARCHITECT AND BUILDER,

A Monthly Journal of Modern Constructive Methods,

(With a Weekly Intermediate Edition—The CANADIAN CONTRACT RECORD),

PUBLISHED ON THE THIRD SATURDAY IN EACH MONTH IN THE INTEREST OF

ARCHITECTS, CIVIL AND SANITARY ENGINEERS, PLUMBERS, DECORATORS, BUILDERS, CONTRACTORS, AND MANUFACTURERS OF AND DEALERS IN BUILDING MATERIALS AND APPLIANCES.

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THE regular fortnightly meetings of the Canadian Society of Civil Engineers, at Montreal, have been withdrawn during the months of June, July and August.

CANADA is usually credited with holding the most advanced position among the colonies of Great Britain. In the matter of associations for the advancement of the interests of builders and contractors, however, we must take second place to Australia and even Tasmania, where organizations of this character are fulfilling a useful purpose.

OUTSIDERS will be apt to think that building enterprises on an extensive scale are unknown in Hamilton, when they see paragraphs in the daily papers of that city referring to the issuing of permits for improvements costing less than $2,000, headed "Signs of the Building Boom." Straws may show which way the wind is blowing, but to predicate a building boom on such slight evidence, denotes extraordinary sanguinity, or an imperfect conception of the meaning of the term.

A VERY practical suggestion for the preservation of the true alignment of curb stones comes from Holland. It consists in the cutting of a hollow in the end of one stone and the working of a corresponding projection on the next. In our climate, where king frost plays such havoc with the roads and pavements, this method would prevent much of the unsightly irregularity inevitable to the usual manner of setting curb stones, and the extra cost would be offset by the greater length of time which would elapse before they would require to be re-set.

It is no uncommon thing to observe in the very centre of our Canadian cities large areas of vacant land owned by religious corporations, on which no taxes are levied. These lands, while standing as a bar to progress are nevertheless greatly enhanced in value by surrounding improvements carried out by private enterprise. In this way the owners grow rich at the expense of their neighbors who assist progress and pay the taxes. Whether or not churches should be taxed, as some contend, it seems but right that the law should be amended to the extent necessary to remedy this injustice which is being perpetuated under its present provisions.

THE Architectural Sketch Club filled up the little room allotted to them at the Ontario Society of Artists' Exhibition with a very interesting series of sketches, many of which were the results of their last season's studies and competitions. The progress of the Club is very noticeable, and the rendering of many of the drawings showed decided artistic ability. We were sorry to notice the tendency to use their room as a store room, giving it an unused appearance, uninviting and somewhat forlorn. It is difficult enough to get the general public to take an interest in architectural drawing, without the bar of an unattractive room.

THE Toronto *Mail* recently contained an editorial on the question of the payment of the clerk of the works on the new City Hall at Toronto, which is entirely to the point and should be read by all laymen, and especially by the members of city councils and other public bodies. The attempt of some of the aldermen to saddle upon the architect even half the expense of the clerk of works is preposterous, and is a cheese-paring policy which can only be detrimental to the work from every point of view. As well might City Engineer Jennings be asked to pay

half the fees of his inspectors. The work is for the benefit of the city, not of the architect, who has already had his fees cut down one per cent. In England an architect is paid the full rate of fees and given a clerk of works as well. The architect should, of course, nominate the clerk of works, being the proper judge of his qualifications and dependent on him for the careful continuous supervision necessary.

THE city of Toronto is sufficiently lacking in public pleasure grounds to make it desirable that those which it does possess should receive the attention necessary to maintain their highest attractiveness. The erection of the Ontario Legislative buildings has largely robbed the Queen's Park of its space and beauty. Queen's avenue might be much improved, but not by the laying of plank sidewalks such as it is stated to be the intention of the city to put down. The Parks and Gardens Committee should endeavor to secure for Queen's avenue the construction of an asphalt roadway and stone or concrete sidewalks.

WITHOUT desiring to bring about changes which would impair the security of the buildings in our cities from destruction by fire, the wisdom of the regulations limiting the materials to be used in residence districts to brick and stone may nevertheless be questioned. While brick and stone may be necessary in closely built localities where a few feet at the most separates one building from another, why should the limit be drawn at these materials where under the terms of his purchase the owner of land must erect a detached dwelling on a lot of at at least fifty feet frontage? Is the loss by fire in Canadian cities less than in American cities like Detroit, where wood is more largely used? If not, then our city building laws should be amended in this particular, in order that architects may have an opportunity by using wood and other materials to achieve the artistic variety of effect which is so pleasing a feature of the residence portions of some American cities.

IT will be remembered that last year the Board of Walking Delegates of the New York Trades Unions endeavored to boycott certain brickmakers. The combination formed by the brickmakers was not sufficiently organized, and the struggle was consequently prolonged, but eventuated in the defeat of the delegates. It appears that this defeat did not teach these individuals wisdom. This season they have fallen foul of the lumber dealers, one of whom refused an insolent bully permission to inspect his shop. Boycott of course followed. The dealers combined in self-defence, stopped delivery of lumber in the troubled district, throwing about one hundred and fifty thousand men out of employment, and bringing the autocratic delegates to their knees. The experience thus gained has proved that the haughty and high handed poceedings of these parasites of the unions can be speedily nipped in the bud by well organized combination on the part of employers, and that they can exercise their power with impunity on individuals only.

WE noticed the other day in one of our dailies an advertisement signed by a "Village Clerk," asking surveyors to tender for the survey and drawing of a plan of the village. The notice wound up with the usual proviso in regard to the lowest or any tender. There is no hint of any desire for suggestions looking to the best effects from a landscape or topographical point of view, but the purpose seems to be to simply get the boldest plan, sufficient to meet the requirements of the Registry Act, and for the lowest possible sum of money. We have in our mind a case where the promoters of a summer resort for economical reasons instructed their surveyor to lay out the grounds and avenues in square blocks, in spite of the fact that the topography of the site suggested an infinite variety of winding roads with gentle inclination, giving vistas of lovely bits of landscape and interesting glimpses of land and water. But the almighty dollar prevailed, and all suggestions of artistic treatment were brushed aside. There is a large field for educational advancement amongst our people in these matters.

THE construction of a belt line railway around three sides of the city of Toronto, has been under way for several months past, and will soon be an accomplished fact. The completion of this road should be greeted with satisfaction by the workingmen of the city. By its means they will be enabled to live in pleasant surroundings in the suburbs, instead of in the undesirable locations in which they are now placed by lack of ability to pay high rentals consequent upon the value of land in desirable localities in the central parts of the city. Of late years the scarcity of houses obtainable at a moderate rental, and the lack of means of rapid transit to the outlying districts, has been very much felt by the working classes. The latter provision will soon be found in the belt line, and instead of living in a tenement house flat as he would soon have to do, the laborer and artisan with their families may enjoy pure air, and if so inclined, may easily become the owners of a piece of land and a comfortable dwelling. Those architects who have been working for nothing in the various competitions of the last two years, might better have exercised their philanthropy by preparing a series of well-planned workingmen's houses, especially designed to improve the health and happiness of the working classes.

ONE of the most important improvements which Toronto and the general travelling public may look forward to with pleasureable anticipation is the proposed new Union Station, which will probably be ready for use some time in the year 1893. The present structure, although extensive, is little better than a way station. Travellers and loungers jostle each other on a platform common to all, while some trains cannot be reached without crossing tracks or even climbing over the platforms of intervening cars to the imminent risk of life or limb should they suddenly begin to move. The platform on the Grand Trunk side cannot be reached without crossing at least three tracks, which are seldom free of stationary or moving trains. It is proposed to make the new station a terminal one—that is, one without tracks passing through it. Trains for the east will back in from the east, and those for the west, from the west. This is accomplished in an ingenious manner. The central building, or station proper, is to be projected through or across the tracks, as it were cutting them in two. Through trains will pass to the southward on special tracks. In the main building a large central waiting room or hall will give access through doors and gates on either side to the platform of the particular train desired, so that even the most uninitiated need make no mistake as to the proper train to take. The trains will stand in the open air, while the platforms will be covered with "umbrella" sheds, a much cleaner arrangement than that of the present smoke begrimed edifice. The various retiring rooms, baggage rooms, &c., are planned with regard to the latest ideas, and as the central building is to be several stories in height, the opportunity is presented of erecting a building of commanding proportions and good design, which it is to be hoped the railways will not fail to profit by.

A CORRESPONDENT in a late number of the *Week* signing herself "Housekeeper" has made some very practical comments on the lack of suitable planning displayed in the typical workingman's house which is rented for ten or twelve dollars per month. She complains in the first case that as a rule the rents are too high for the average workman's income, about one-fourth of which is sunk in providing shelter for himself and his family. In former times the workman had a cottage not too far from his work. This cottage had a small parlor and a large apartment which was living room and kitchen combined—a desideratum where the housewife has to combine in herself all the functions of cook, nurse, seamstress and housekeeper. The cottage has given place to the pretentious row, or the semi-detached house, with rent far beyond the means of the mechanic, and he has had to move to the outskirts, near the terminus of a street car line, where acres on acres and rows on rows of rough cast houses with brick veneered fronts have been put up for his accommodation. These houses contain on the ground floor a kitchen and two rooms, practically double parlors, each being considerably larger than the kitchen. The kitchen is a cramped, narrow room, depending for its light and air upon a narrow space between it and the adjoining kitchen. It has little or no pantry accommodation; a narrow cupboard about the depth of a good sized plate has to contain the crockery, the food cooked and uncooked; and most likely this cupboard is in close proximity to the stove. Here the family eats, and here the washing and

ironing is done. The cellar usually consists of one compartment containing furnace, coals and ashes, and quite unfit for the cleanly storage of food.

"Housekeeper" maintains that one moderate sized parlor is sufficient—a room which may be pretty and pleasant, where the man and wife can retire after the work is over and the children in bed, and where they can receive their friends free from the presence of their more common-place surroundings. Then she would have the kitchen a large, roomy apartment, the common family room, with space for two tables and two windows. The abolition of the second parlor would permit of a roomy pantry, lighted and ventilated, and a good wardrobe or clothes closet. Opening off the kitchen, "Housekeeper" would have the summer kitchen, where the hot stove could be placed in the summer months, and tubs, pots and pans all the year round. She says: "Such a ground floor for his house could not fail to win the approbation of the workingman and his wife by reason of the comforts arising from the ordered arrangement of the household thus rendered possible, and surely commends itself to the judgment of the landlord and the architect. The cost of such arrangement would not be one cent more than that of the present ill-adapted house to its users as a home, and therefore no objections could be made on that score."

"Housekeeper" either forgets or does not know that an architect is seldom or never employed to plan houses of the class to which she refers. The speculative builder has been abroad in the land these ten or fifteen years, and to his genius must be credited the apologies for houses which disfigure so many miles of our streets. We would commend the suggestions of this very practical woman to the aforesaid builders, and would counsel him to seek out some clever young architect who will embody her views in a plan which should prove popular with her sisters who must perforce spend a large portion of her working hours in the kitchen.

MORE COMPETITIONS.

THE series of "architectural competitions," by taking part in which Canadian architects are invited to "distinguish" themselves, seems far from being exhausted. Below are reprinted a couple of invitations addressed to Toronto architects during the last month:

TO ARCHITECTS AND OTHERS.

The Churchwardens of St. James' Cathedral Church are prepared to receive designs for the completion of the Organ Cases. Information as to general character of work proposed and cost of same can be obtained from the Vestry Clerk at the school house.

INDUSTRIAL SCHOOLS' ASSOCIATION.
GENERAL SECRETARY'S OFFICE,
32 CHURCH ST., TORONTO, May 19th, 1891.

DEAR SIR,—As you have perhaps heard, the Industrial Schools' Association intends erecting, during the present summer, at East Toronto, the first buildings for the Alexandria Girls' School, at an expense of about $20,000. It has been indicated to us that, if requested, the city architects might make a contribution of their services in planning and superintending the construction of these buildings; and in view of this, the Board of Management, instead of asking any one specifically, have thought it only just to give all an opportunity to present designs in accordance with the enclosed general specifications. If you wish to aid us in this way, we shall be glad if you will send in to the address of the General Secretary, Board Room, 32 Church street, on or before June 10th such sketches as you may think suitable, showing elevation and arrangement.

The authors of the plans chosen, will, of course, have the superintendence of the work, and will be entitled to preference for future work.

Yours very truly,
CAMILLA B. SANDERSON,
Gen. Sec'y.

Two features are becoming more and more noticeable in these competitions, viz., a growing disposition on the part of corporations and individuals to obtain the ideas of architects without paying for them, and to adopt the competition scheme for the accomplishment of this object in works of small cost as well as those of more importance. In other words, the competition business is going from bad to worse. The cool assurance with which it is assumed that architects are ready to snap at any chance of securing employment, regardless of whether the competitions they are asked to enter are subject to any of the conditions which should properly govern them, seems to clearly indicate the status to which the profession has been degraded in the eyes of the public by the conduct of a portion of its members.

It will be observed that in neither of the above invitations is given the name of a competent person appointed to pronounce judgment upon the work of the competitors, nor is the slightest reference made to the all important question of the method to be adopted for determining the merits of the designs to be submitted. The architect is expected to take a leap in the dark.

The action of the vestry of St. James Cathedral, besides being a direct insult to the architects who successfully carried out the recent improvements in the interior of the edifice, must prove to be extremely short-sighted from the standpoint of the church's interest. The designing of an organ case in such a position is admittedly a difficult undertaking, requiring special skill. The number of architects who could perform the work satisfactorily is extremely limited, and it may safely be asserted that not one of them will respond to the vestry's invitation. The churchwardens might better have accepted the design which is understood to have been prepared by the architects who carried out the other improvements, and of whose services they have deprived themselves by their discourteousy.

We are led to wonder by whom it was indicated to the Industrial School Association that "the city architects might make a contribution of their services in planning and superintending the construction of these buildings." Was not the "indicator" located in the fertile brain of the author of the above letter or some other promoter of the enterprise? To an outsider, the "indications" seem to point that way.

Notice how the Association dilates upon its sense of justice in giving "all an opportunity to present designs," instead of "asking any one specifically." What consideration is here displayed for those architects who might have felt themselves slighted had the opportunity not been given them to do the work for nothing! How singular that this feeling of consideration did not prompt the officers of the Association to suggest something in the way of remuneration for the purpose of assisting the architects to maintain an existence. True there is the statement at the close of the letter that the "authors of the plans chosen will, of course, have the superintendence of the work, and will be entitled to preference for future work." It is difficult to decide, however, what dependence to place on this, in view of the statement previously made that it was thought the architects might make a *contribution* of their services in planning and superintending the construction of the buildings.

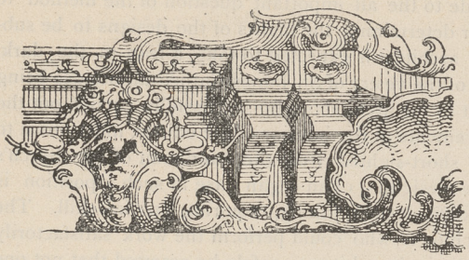
It is cause for indignation to the architect who knows what is due to his profession, that such indignity should be heaped upon it. On the shoulders of men in the profession must be placed the responsibility for the present condition of affairs. In their desire to gain prominence and a temporary advantage, they have disregarded and brought into disrespect the ethics of a noble profession. As a result, the public has come to place an exceedingly low estimate upon the value of an architect's services. Every man who practices the profession must in consequence suffer to a greater or less degree, until a feeling of deeper self-respect takes possession of the class of members of which we have spoken.

It was the hope of many that the formation of the Ontario and Quebec Associations of Architects would tend to greater *esprit du corps* within the profession. That to some extent at least this hope has been disappointed, is shown by the manner in which members of both Associations have entered competitions contrary to the well-founded advice of the Executive Councils. The leniency of the treatment accorded to persons who have thus acted in violation of the wishes of the Associations and lowered the standard of public estimation for the entire profession, is well calculated to promote rather than curtail the evil. The severe example made of offenders of this class by the legal and medical societies is what secures for them public respect.

The public should not be censured for endeavoring to get its architectural work done for nothing. If every architect will honorably abide by what is known to be the tariff approved by the Architectural Associations and give the cold shoulder to every competition the terms of which do not commend themselves to the executive officers of these Associations, the profession will speedily rise to a higher plane.

Stone newly fractured should present a bright, clean appearance, with grains well cemented together. A rough test to prove whether a stone is likely to stand in the smoky atmosphere of towns is to soak it for a few days in dilute solution, containing one per cent. of sulphuric acid and hydrochloric acid.

"MODELLING."



MR. M. J. Hynes, who lectured before the Toronto Architectural Sketch Club on the close of the season's work, took for his subject "Modelling," classifying modelling under three heads:—first, modelling which is art, second, modelling which is unworthy of the name of art, and which for want of a better name is called "Romanesque," and third, the modelling of character.

He dwelt for some time on the Romanesque of the undiscovered periods which had been developed in America by Richardson, and regretted that the architects of Canada had not seen fit to deal with the natural foilage of their country, or to take up the Renaissance of the modern Italian treatment. On the third part he was sarcastic, without being personal, on the architects of the city, showing forth the advisability of the members of the Sketch Club developing the high standard of character which should belong to the profession.

In taking up the arts, Mr. Hynes undertook to criticise Michael Angelo's "Moses," the placing of the arms on Venus de Medici, and the hands and arms of Venus de Milo, and presuming that the practical portion would be interesting to the students of the profession, undertook to illustrate how these great works of art were reproduced from clay models. He also treated and illustrated the method by which the chains in marble were placed upon the Greek slave, and how the classic bronzes were reproduced in the present day. He dwelt for a considerable time on the mistakes we make in our details. His blackboard illustrations were crude, yet pointed. He reproduced, for example, some illusions, by which a matrix showed in bold relief, deceiving the eye of the most critical.

Mr. Hynes finished his remarks by reproducing a rough sketch in clay of the late Sheriff Jarvis, an esteemed friend of his, and uncle of one of the architects present. Mr. Hynes stated that Mr. Frank Darling had presented the Sketch Club with the original models of the ornament for the improvements in the Dominion Bank, together with some of the lecturer's own work.

TORONTO ARCHITECTURAL SKETCH CLUB.

ON Saturday afternoon, April 18th, a large number of the members met at the Victoria Hospital for Sick Children, and were kindly shown over it by Mr. S. C. Curry, who explained everything in detail and took great care to point out the various purposes of the building, making in this way the visit very profitable.

The members then proceeded to the School of Practical Science, where Professors Wright and Galbraith courteously conducted them through the building. The testing machine proved extremely interesting, and some little time was consumed in listening to a description of the various uses to which the machine could be put. The fine collection of architectural photographs and specimens of students' work were then examined.

During the course of the afternoon a photograph was taken of all present by Mr. C. J. Gibson, who intends presenting to the Club an enlarged copy. This is not the first time that Mr. Gibson's camera has been the means of making the Club indebted to him, as he made a present some time ago of several good specimens of his work, mounted and framed.

The competitive designs for a "Staircase in Wood" were on exhibition on Monday evening, April 27th, and as the critic, Mr. Frank Darling, was unable to be present, on his suggestion each member gave a short criticism of the drawings from his own individual point of view, thus bringing out a variety of ideas. The drawing by Mr. Murray A. White was unanimously awarded first place.

At the close Mr. S. G. Curry made some practical remarks on staircases in general.

The last regular meeting of this season was held on May 18th, when Mr. M. J. Hynes gave a talk on "Modelling," to illustrate which he had sent some clay and necessary tools to the Club rooms, and in a practical way elucidated the mysteries of his subject. A synopsis of this talk is given in another column.

There will be a social gathering of the Club at the Toronto Art Gallery on Thursday, June 25th, and it is hoped that all friends and members of the Club will be present.

QUERIES AND ANSWERS.

MONTREAL, May 21, 1891.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—Would you kindly inform us of some preparations for coloring a Toronto pressed brick front built last fall, the plastering having been done during the winter. The mortar is a dark blue, and it is almost impossible to rub it off the bricks. By enlightening us on this subject, you will greatly oblige.

Yours truly,

J. BRUNET & SON.

[It would be a pity to attempt to color pressed brick as suggested by our correspondent. The method adopted by bricklayers in Toronto for removing plaster stains on brickwork is as follows: First scrub thoroughly with water and brush, then wash with muriatic acid, using a whitewash brush; then scrub again with water and brush. The acid may be used in proportion of a half pint or a pint to a pail of water. If the set dressings are of Portage Entry stone, it will be necessary to carefully avoid letting the acid touch it. Credit Valley stone is uninjured by contact with the acid.—ED. C. A. & B.]

STANSTEAD, QUE., May 16, 1891.

Editor CANADIAN ARCHITECT AND BUILDER.

DEAR SIR,—I wish you would make your "Hand-Book" larger and better, giving a basis for a contractor to work from in all branches of building. For example, the time required to lay 1 M. brick 4″, 8″, 12″ and 16″ wall and a veneered wall, also examples of circular towers, arches, buttresses, and illustrate and show how height affects the time required (I use 15′ for base, add 1-5th for every 5 feet); time required to frame and put up 1,000 scantlings, with several varying cases illustrated.

I think a book of this kind would sell. I would be glad, if got up on correct reasonings, to pay $5 or even $10 for one.

Yours truly,

B. F. KEZAR.

[It would be a difficult and expensive matter to prepare a hand-book in the manner suggested by our correspondent which would be universally applicable. The rate of wages and value of materials vary so considerably in different localities that the information would be suitable for a limited number of localities only, unless elaborately gone into. The expense of preparing such a book in Canada would not be warranted by the prospective returns which might be looked for even by the most sanguine publisher.—ED. C. A. & B.]

MONTREAL, June 15th, 1891.

Editor CANADIAN ARCHITECT AND BUILDER.

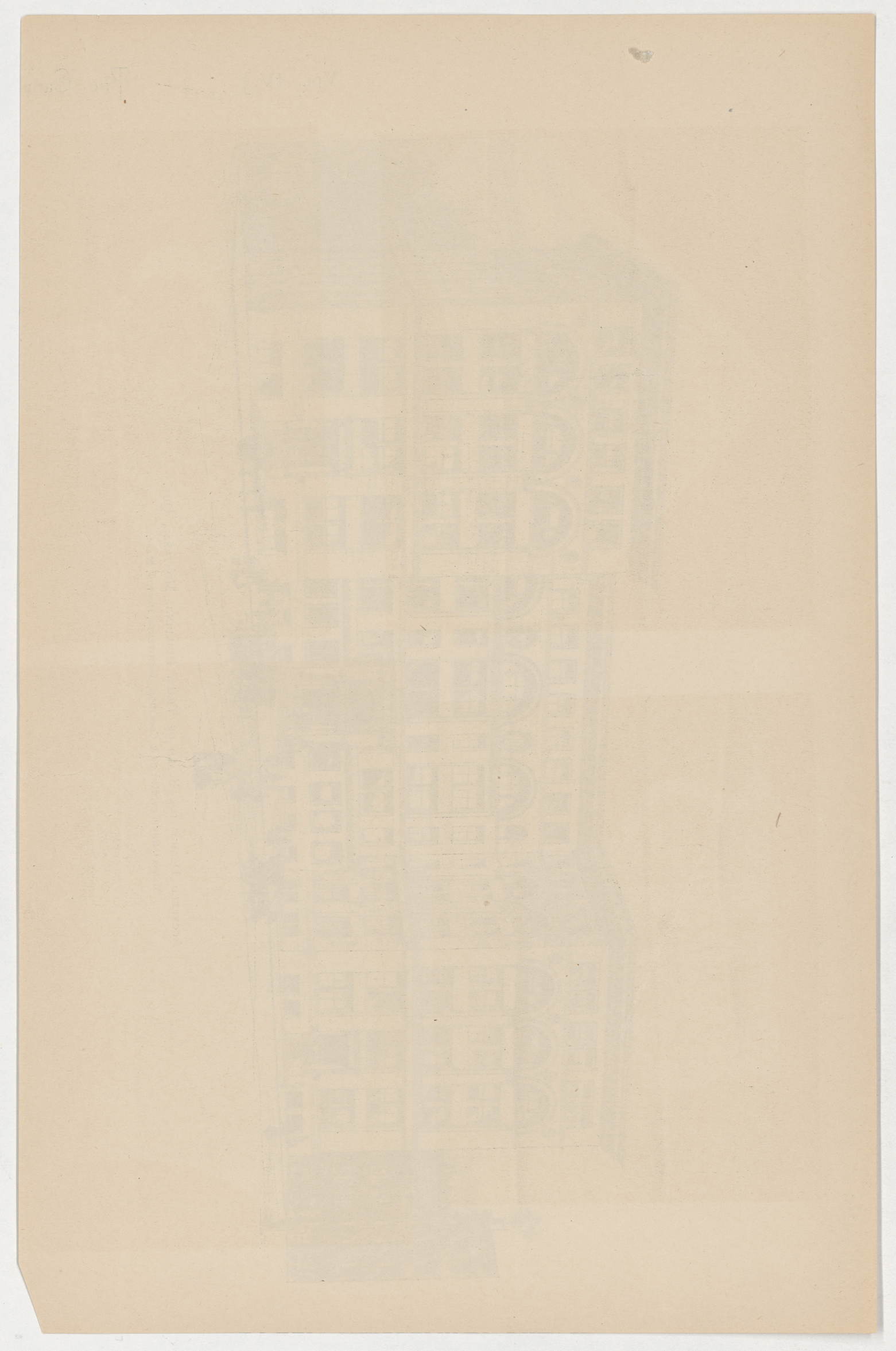
DEAR SIR,—According to the resolution which was unanimously adopted at the annual meeting of the Province of Quebec Association of Architects, held in Montreal on the 10th and 11th of October, 1890, was it not decided to use the columns of the CONTRACT RECORD when calling for tenders? How is it then that so few Montreal architects comply with the above resolution, although many contracts are being let out?

Yours truly,

CONTRACTOR.

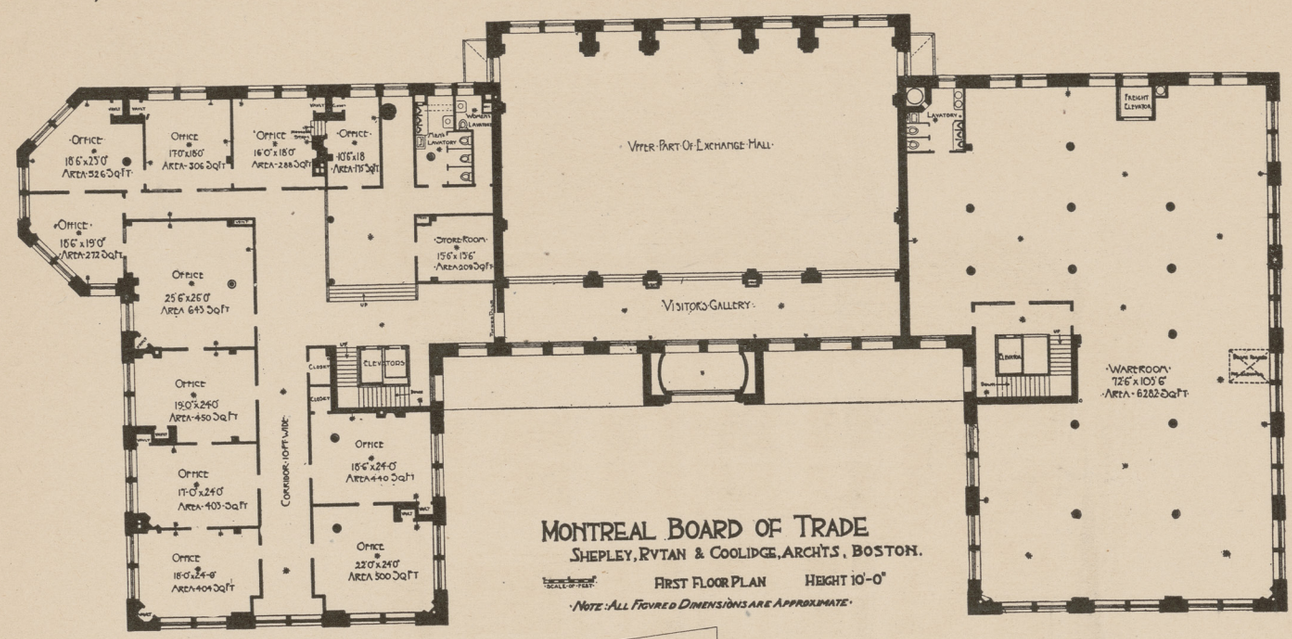
[Such a resolution as our correspondent mentions was unanimously passed by the Quebec Association. We are not in a position to give the reasons which may prompt individual members of the Association to ignore the fulfilment of their promise. —ED. C. A. & B.]

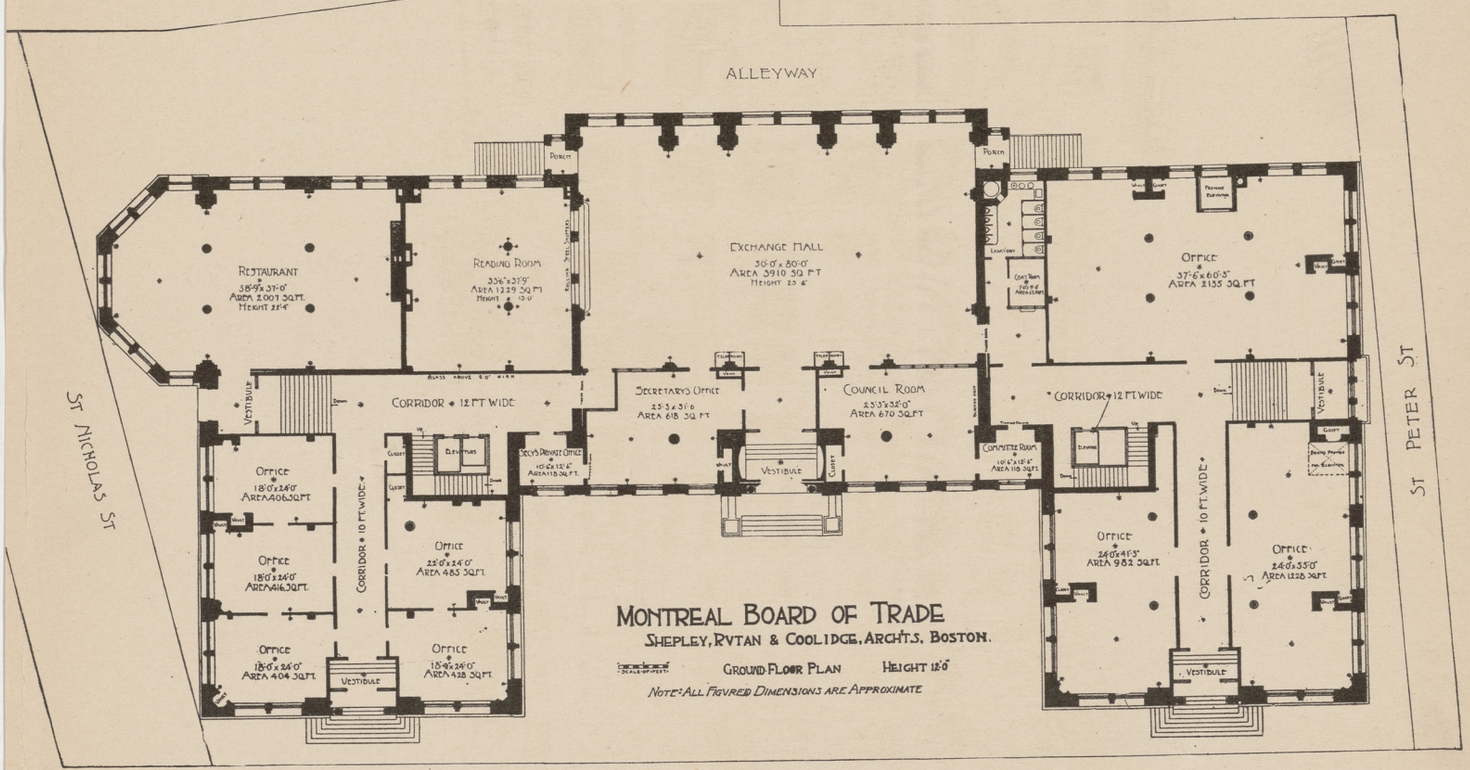
We are in receipt of a copy of a new catalogue just issued by the Toronto Radiator Co. The cover is of black cardboard with the name and address of the Company embossed thereon in copper and silver. An antique and artistic appearance has thus been gained, and one which marks a departure from previous publications of this character. This catalogue is distinctive also from the fact that it is the first published in Canada, and the second in America, devoted exclusively to radiators. It contains 66 pages, in which are presented on fine plate paper handsome illustrations of the various sizes and styles of radiators manufactured by the Company, tables of prices, and a large amount of other data relating to the same.

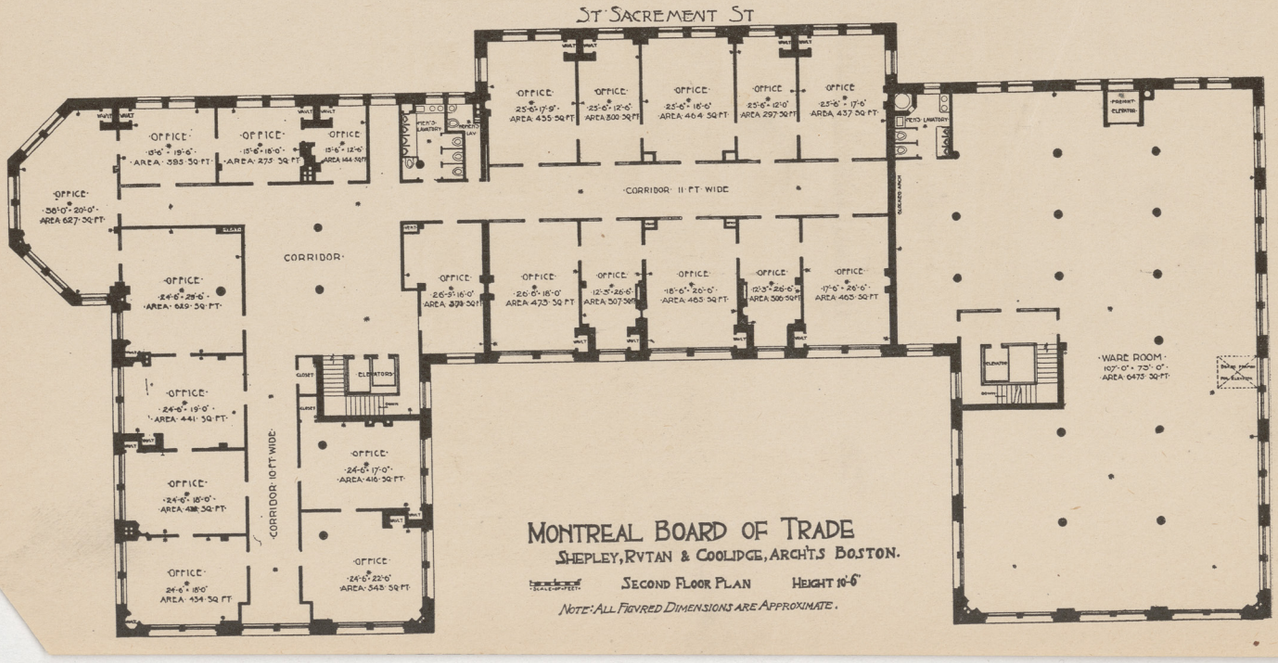


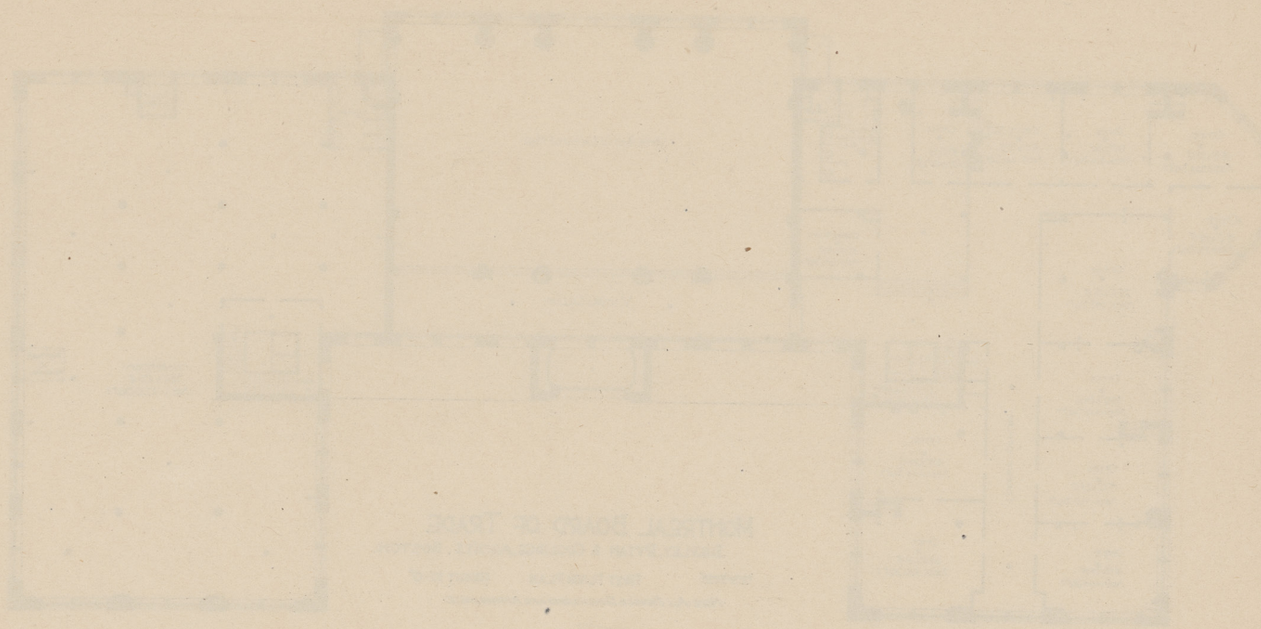
Accepted Design for Board of Trade Building. Montreal, Que.

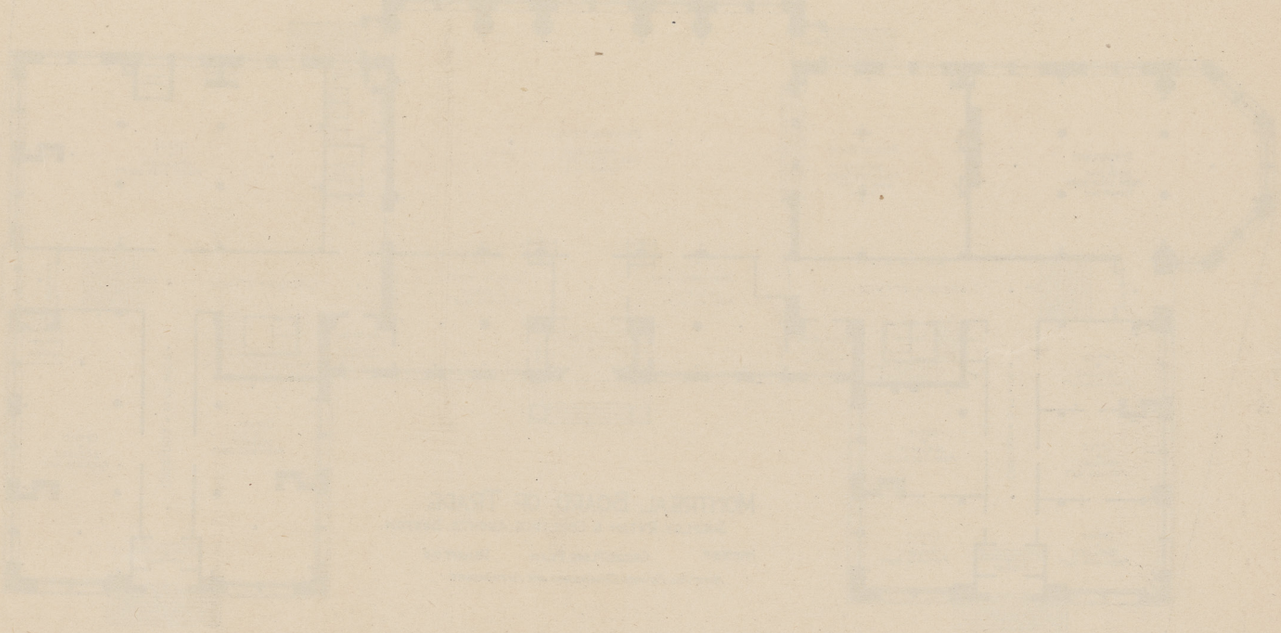
Messrs. Shepley, Rutan & Coolidge, Architects, Boston, Mass.

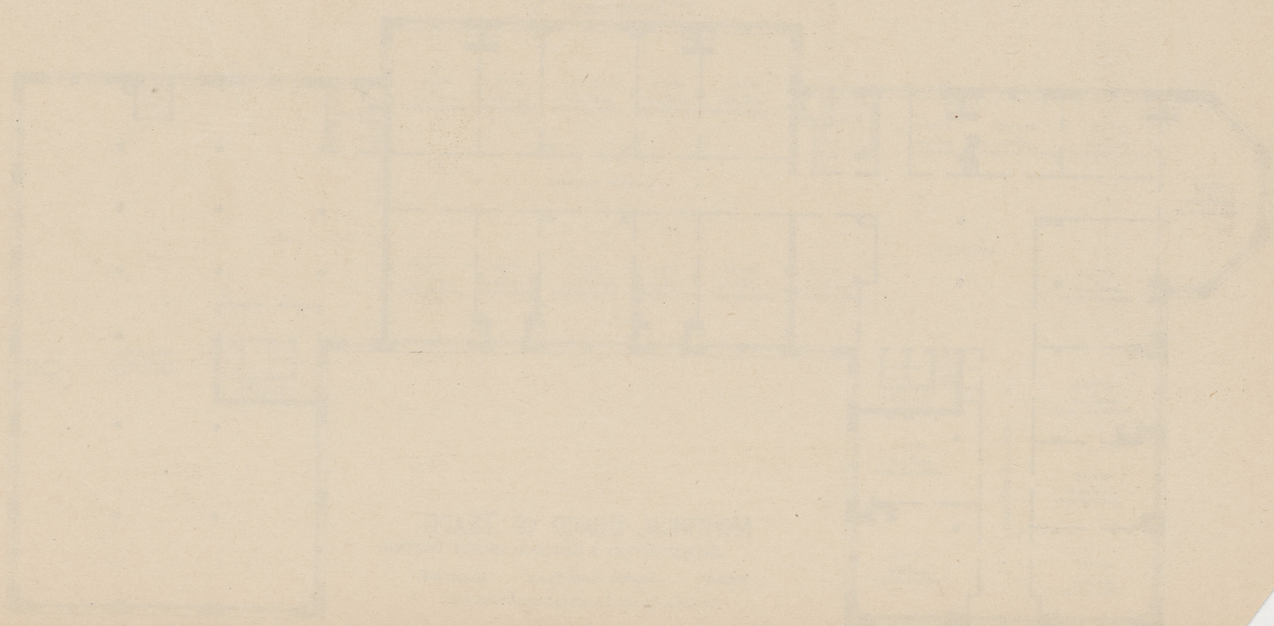

Office 18'6"x23'0" Area 526 Sq Ft
Office 17'0"x18'0" Area 306 Sq Ft
Office 16'0"x18'0" Area 288 Sq Ft
Office 10'6"x18' Area 175 Sq Ft
Office 18'6"x19'0" Area 272 Sq Ft
Office 25'6"x26'0" Area 643 Sq Ft
Office 15'0"x24'0" Area 450 Sq Ft
Office 17'0"x24'0" Area 403 Sq Ft
Office 18'0"x24'0" Area 409 Sq Ft
Store Room 15'6"x15'6" Area 309 Sq Ft
Office 15'6"x24'0" Area 440 Sq Ft
Office 22'0"x24'0" Area 500 Sq Ft
Corridor 10 Ft Wide
Elevators
Outer Part Of Exchange Hall
Visitors Gallery
Freight Elevator
Warehouse
Warehouse 72'6"x105'6" Area 6282 Sq Ft
MONTREAL BOARD OF TRADE
SHEPLEY, RVTAN & COOLIDGE, ARCHTS., BOSTON.
FIRST FLOOR PLAN HEIGHT 10'-0"
NOTE: ALL FIGURED DIMENSIONS ARE APPROXIMATE.

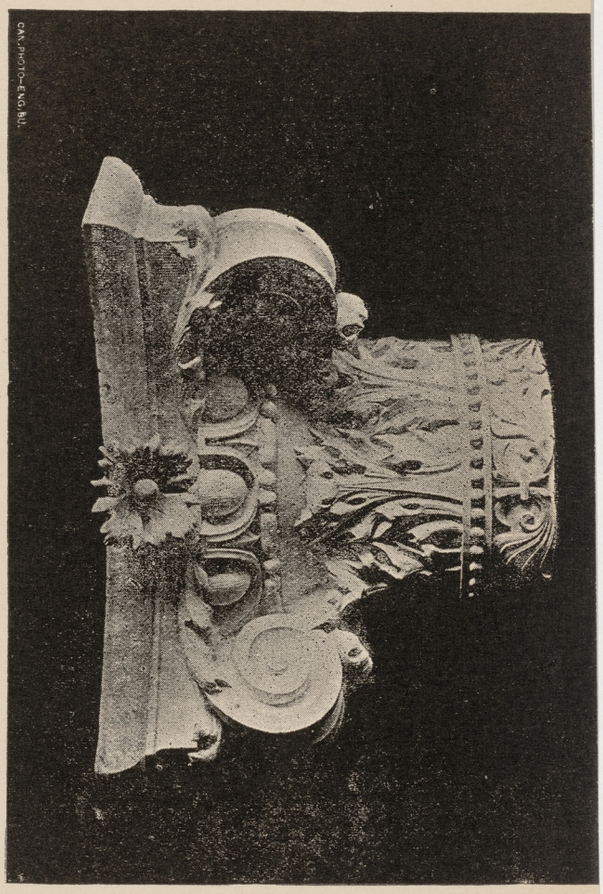

ALLEYWAY
ST NICHOLAS ST
ST PETER ST
Restaurant 36'9"x37'0" Area 2007 Sq Ft Height 25'4"
Reading Room 25'6"x37'9" Area 1239 Sq Ft Height 13'0"
Exchange Hall 50'0"x80'0" Area 3910 Sq Ft Height 23'4"
Secretary's Office 23'3"x31'6" Area 618 Sq Ft
Council Room 23'3"x32'0" Area 670 Sq Ft
Secy's Private Office 16'6"x32'4" Area 518 Sq Ft
Computer Room 10'6"x18'6" Area 116 Sq Ft
Office 37'6"x60'3" Area 2155 Sq Ft
Office 18'0"x24'0" Area 406 Sq Ft
Office 18'0"x24'0" Area 416 Sq Ft
Office 18'6"x24'0" Area 404 Sq Ft
Office 23'0"x24'0" Area 485 Sq Ft
Office 18'6"x24'0" Area 428 Sq Ft
Office 24'0"x41'3" Area 982 Sq Ft
Office 24'0"x55'0" Area 1226 Sq Ft
Corridor 12 Ft Wide
Corridor 10 Ft Wide
Vestibule
Elevators
MONTREAL BOARD OF TRADE
SHEPLEY, RVTAN & COOLIDGE, ARCHTS. BOSTON.
GROUND FLOOR PLAN HEIGHT 12'0"
NOTE: ALL FIGURED DIMENSIONS ARE APPROXIMATE

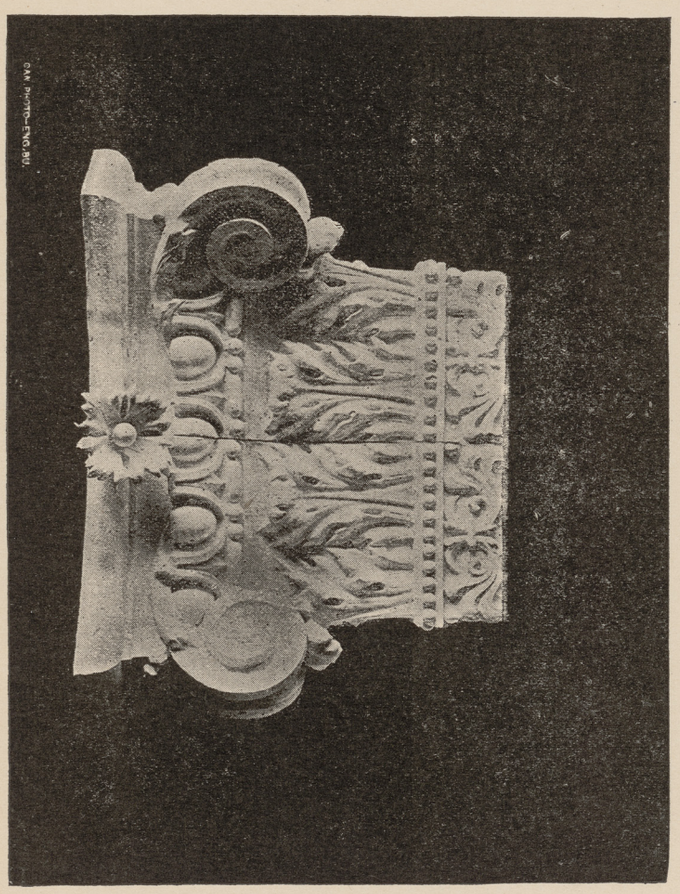

ST SACREMENT ST
Office 25'6"-17'8" Area 455 Sq Ft
Office 25'6"-12'6" Area 300 Sq Ft
Office 25'6"-16'6" Area 464 Sq Ft
Office 25'6"-12'0" Area 297 Sq Ft
Office 25'6"-17'6" Area 437 Sq Ft
Corridor 11 Ft Wide
Office 15'6"-19'6" Area 385 Sq Ft
Office 15'6"-16'0" Area 275 Sq Ft
Office 15'6"-12'6" Area 144 Sq Ft
Office 36'0"-20'0" Area 687 Sq Ft
Corridor
Office 24'6"-25'6" Area 589 Sq Ft
Office 24'6"-19'0" Area 441 Sq Ft
Office 24'6"-18'0" Area 438 Sq Ft
Office 24'6"-18'0" Area 434 Sq Ft
Corridor 10 Ft Wide
Office 26'0"-16'0" Area 398 Sq Ft
Office 26'0"-18'0" Area 473 Sq Ft
Office 12'-5"-26'6" Area 307 Sq Ft
Office 18'6"-20'6" Area 465 Sq Ft
Office 12'5"-26'6" Area 500 Sq Ft
Office 17'6"-26'6" Area 465 Sq Ft
Office 24'6"-17'0" Area 416 Sq Ft
Office 24'6"-22'6" Area 548 Sq Ft
Elevators
Ware Room 107'0"-75'0" Area 8479 Sq Ft
MONTREAL BOARD OF TRADE
SHEPLEY, RVTAN & COOLIDGE, ARCHTS BOSTON.
SECOND FLOOR PLAN HEIGHT 10'6"
NOTE: ALL FIGURED DIMENSIONS ARE APPROXIMATE.











PLASTER DETAILS, DOMINION BANK CEILING, TORONTO.

(EXECUTED BY HYNES TERRA COTTA CO.)

DARLING, CURRY, SPROATT & PEARSON, ARCHITECTS, TORONTO.

RESIDENCE ON SUSSEX AVE. FOR R. S. McINDOE ESQ. E. B. JARVIS ARCH.T.

Traders Bank Chambers Toronto

OUR ILLUSTRATIONS.

PHOTOGRAVURE PLATE, BANK OF MONTREAL, TORONTO.—DARLING & CURRY, ARCHITECTS, TORONTO.

ACCEPTED DESIGN FOR NEW BOARD OF TRADE BUILDING, MONTREAL, QUE.—SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS, BOSTON, MASS.

PLASTER DETAILS, DOMINION BANK CEILING, TORONTO, (EXECUTED BY HYNES TERRA COTTA CO.)—DARLING, CURRY, SPROATT & PEARSON, ARCHITECTS, TORONTO.

HOUSE ON SUSSEX AVENUE, TORONTO.—E. B. JARVIS, ARCHITECT, TORONTO.

THE MEANING OF ARCHITECTS' CERTIFICATES.

HAMILTON, May 5, 1891.

Editor CANADIAN ARCHITECT AND BUILDER.

SIR,—In looking over your April edition, I notice report of a discussion which took place at the meeting of the Ontario Association of Architects, which meeting I was unable to be present at. It would appear that some of the profession favored the idea that when an architect issued a certificate he should assume the whole responsibility the issue of that certificate implied. Are we to assume from that, the issue of a progress certificate means the work has been passed upon and accepted by the architect, or is it to mean just what the certificate implies? I have been using both in Canada and the United States, and I take the liberty of sending you a copy of form and stub. This certificate I have found to give entire satisfaction to all parties concerned, and I think will cover the point in discussion.

Yours truly,

JOS. POWELL.

The form of certificate referred to by Mr. Powell reads as follows:

This Certificate is given to show that....., Contractor (or Workman), has performed labor to the value of $....., and delivered material to the value of $....., upon the Contract for ..... according to Plan marked..... on ..... Street, in the..... of....., County of..... , Province of..... This estimate is made equitable, in so far as it is possible to judge of work in its present incomplete condition. The Proprietor may therefore advance $..... in accordance with the conditions of Contract for said work (this Certificate in nowise varies conditions contained in Contract), as to the acceptance of work or completion of Contract.

Dated this..... day of....., in the year 189..

Overseer's Signature.

.....

STRUCTURAL IRONWORK.

BY GEORGE H. BLAGROVE.

METAL supports present themselves to the mind of the modern architect as being of cast iron, wrought iron, or steel. If he has to choose between cast and wrought iron, he will probably select the former, if there are great dead loads to be carried, and the latter if there is likely to be much vibration. With a series of superimposed columns in a building of several storeys, it becomes a question what is the true proportion of the diameter to the height; for unless the columns are effectually steadied at their junctures by means of cross girders, the whole series is more like one column than several. It is well known that when a column or stanchion exceeds twenty-five diameters in height, wrought columns are preferable to cast ones of the same sectional area; and at forty diameters high we can get the same strength with twenty-five per cent. less metal. Against this advantage the architect has to set the fact that the labor involved in constructing the rivetted columns involves an increase of from twenty to thirty-five per cent. over the cost of cast supports. When we come to employ rivetted columns, we are led to consider the advisability of substituting steel for wrought iron, if the loads to be carried are very considerable, and especially in cases where a close economy of lighting space is essential, as, for example, in the fronts of business premises. By the use of steel, not hardened, we can obtain about ten per cent. more strength than by employing wrought iron, but with some fifteen or twen y per cent. additional cost. Strength for strength, therefore, the additional cost involved will probably not exceed ten per cent. But by using hardened steel, of mean temper, we can obtain an increase of strength over wrought iron of something like 250 per cent. We have not yet commenced using steel stanchions as extensively as we might.

Whether dealing with cast iron, wrought iron, or steel supports, the modern architect prefers symmetrical sections for his columns and stanchions. He avoids having narrow stanchions of E. section where he possibly can, because he knows that these are liable to become bowed in cooling. He knows, also, that supports of any material will deflect in the direction of their least diameter; aad therefore where he has to use unsymmetrical or narrow sections, he prefers enclosing them with brickwork or concrete if he can.

In the use of rivetted girders, the attention of architects is often directed to the advantages attaching to the use of steel. The practical architect, however familiar with the materials at his disposal, is not misled into designing steel girders of precisely the same section as those of wrought iron. He knows that, other things being equal, a steel rivetted girder will safely carry about forty per cent. more than one of wrought iron; but he also knows that the elasticity of the two materials is about the same. He therefore avoids assuming a proportionate limit of deflection in calculating the load upon a steel girder. Strength for strength, a steel girder will contain about one-third less metal than one of wrought iron; and if the depth be the same, the deflection will be the same; but the depth of the steel girder must not be reduced, unless we are reconciled to an increase of deflection.

The bedding of iron or steel supports and girders obliges us to take intimate cognizance of the other materials with which the metal is brought into contact. The superficial area covered by the base-plate of a column or stanchion is designed by the architect to be of sufficient extent to avoid the slightest danger of cracking the bedstone beneath. If the column be loaded to the extent of three tons per superficial inch of sectional area, the architect will probably make the nett area of the base-plate about eighteen times the sectional area of the column, supposing the base-plate to be of Yorkshire stone. With a bedstone of Craigleith or Bramley Fall, he would probably consider a proportion of sixteen to one ample for safety; but he would not go much below this limit, whatever the conditions of load might be, because he would naturally wish to impart steadiness to his columns by spreading them well at the base. In the case of a steel stancihon, loaded to the extent of eight tons per inch of sectional area, many architects would employ a bedstone of Aberdeen granite, and whether the steel stanchion were provided with a cast iron base or not, they would not think it necessary to give the base-plate a larger area than sixteen times the section of the stanchion.

Most persons are particular—and rightly so—about having all cap and base-plates perfedtly even and smooth. They know the danger of uneven bearings, and insist upon all cast bearing surfaces being turned. Packing with felt between bearing surfaces has often been resorted to for the purpose of equalizing the pressure when the iron is slightly irregular. Many persons, however, regard such devices with a suspicious eye, pointing out that felt packing is useless, except under very slight pressures. The felt, they say, is squeezed into greater density at certain points where there are prominences upon the surface of the iron, while at other parts, where it is desirable to distribute the pressure, the felt retains its normal density and is practically inoperative. They argue that sheet lead is preferable, because it adapts itself, under pressure, to the irregularities of the iron without changing its density in any part. There cannot, indeed, be any doubt that lead is efficacious in neutralizing the effect of vibrations, for which purpose its use may be recommended even when there are no irregularities of surface in the iron. Lead also possesses this obvious advantage over felt, that it is not subject to decay.

Various opinions prevail as to how the base-plates of metal columns and stanchions should be fixed to the bedstones beneath. The old plan of having lugs formed upon cast base-plates has been pretty generally abandoned. The lugs are apt to break off, and at best they are of little use to steady a column; they can but prevent it from slipping laterally. In bolting a base-plate to a bedstone, some architects insist upon having bolt-holes drilled or jumped through the whole depth of the stone, so that the heads of the bolts may be on the underside. They are not satisfied with the usual practice of sinking lewis-holes in the stone for the reception of lewis-bolts which are run in with lead. They maintain that the lewis-bolts are liable to be loosened if there is the slightest tendency to oscillation in the columns or stanchions, and that if bolts are necessary at all, they are required not so much to resist tensile strain as to ensure closeness of grip. There are others who contend that broad base-plates under heavy columns are sufficient to ensure steadiness without the aid of bolts, and they recommend forming a square sinking in the bedstone to receive the base-plate and prevent all possibility of lateral displacement. Whether bolts are employed or not, there are two advantages in sinking the bedstone. In the first place, the depth of the sinking can be regulated so as to allow a little play in the height of the column. This is desirable when the ironwork is not delivered upon the site until a portion of the building is up, and stone templates have been laid ready to receive the ends of girders which take their bearing also upon the iron supports. Another advantage in sinking the bedstones is that the sunk portion alone requires to be worked even and true; the remaining portion of the upper surface need not be worked at all. This serves to economize labor when large bedstones of granite are used.

Some difference in practice prevails as to the bedding of girders. Many architects object to countersunk rivets being used at those portions of a girder where it takes its bearing upon a stone template, objecting to the sacrifice of strength in the countersink. They insist upon spherical-headed rivets being used, the stone being countersunk to receive them. Others, wishing to save the labor involved in countersinking the stone, have the end of the girder bedded in Portland cement, which expands slightly in setting, and ensures an equality of pressure between the girder and the stone. The practical architect, however, knows the time that must elapse before Portland cement can attain its full strength, and, although he does not wait long enough for it to do this, he will probably allow for a month's setting before subjecting the cement to the full pressure which it is required to sustain permanently. In the meantime he will will either postpone completely loading his girder, or, more probably, he will have it shored up. The rapidity with which modern buildings are run up generally makes it imperative to load a girder almost as soon as it is fixed. The architect is not afraid to trust the strength of Portland cement when properly set, knowing that it will resist compression as well as most sandstones. If he wishes to sustain a pressure greater than granite will bear, he will have recourse to cast-iron honey-comb bed-plates, which will distribute the pressure over a larger surface of stone than the end of a girder will cover.

In scheming structural ironwork, we may be led to consider how far vertical supports can be made available for relieving the external walls of a building from the thrust exerted by the roof.—*Specialities.*

MOULDINGS.

MR. Gambier-Bousfield's paper on "Mouldings," read before the Toronto Architectural Club last November, was, as we have previously remarked, illustrated by a number of diagrams and sketches, but without reproducing these—which, being very complete, were a lecture in themselves—the paper printed here in its entirety would not be so easily understood. The following is, however, an outline of the paper:

Although students in this country had not ancient examples to measure and study for themselves and were consequently unable to see the effects produced by the combinations of mould forms, in the situations for which they were originally designed, yet it is of the utmost importance that students should master the principles of mouldings, and become familiar with the characteristics of the outlines peculiar to each period of architecture. It is a mistake in speaking of the various styles or orders to consider each as separate and apart from others—styles are really inseparable; each period grew out of the one before it, and to comprehend any particular period some knowledge must be obtained of all previous periods, in order that the cause, the why and wherefore of every detail may be understood.

Every detail, whether constructional or ornamental, had its origin in actual necessity; there was no such thing as a feature being introduced originally simply for effect. The column was a constructional necessity, and its ornamental cap and base were originally mere blocks for the purpose of distributing pressure, improved into ornamental features as the art advanced. So again, if there was an opening in the wall, such as a window or a door, it was a necessity to put some projection in the wall above, that would protect the opening from the flow of water down the face of the wall, and here we find the origin of the drip or label mould, the most practical of all mouldings.

The work of an architect of to-day is that of *adaption*. It is his part to adapt old forms to present requirements, not to copy slavishly this or that feature simply because it belonged to the period of which he is designing a building, but to make use of the *principles* of that period, and adapt them to present requirements. Every moulding was originally designed with an eye to the position it was to occupy, and therefore it is a foolish thing now to design a mould that looks well beneath the eye of the designer on his board, that is intended to occupy a position say, twenty feet above his head when carried out, although this is what is constantly done.

But to turn to the forms of mouldings and notice how each grew out of another. There is the "fillet" of classic art by rounding the edge of which the "bead" is formed, sometimes raised on the surface, sometimes sunk, the "quirk" following upon the sinking of the bead, by the cutting off of the right angles of the sinking. Then there is the "torus" or enlarged bead, but used independently of the flat surface of the wall. The "cavetto" is the reverse of the "torus." Resulting from these two, the "torus" and "cavetto," is the combination of the "cyma recta," the half torus forming the lower, while the whole "cavetto" makes the upper portion. The "cyma reversa" is as its name implies, the reverse of the "cyma recta." The "cyma recta" is more generally known and spoken of as the "ogee." Then there is the graceful "ovolo," one of the most beautiful of Greek curves, the small abrupt quarter-circle at the top and the long gentle curve below. The Romans deprived this mould form of its beauty in their adaptation of it—as they did every feature they made use of—and their ovolos were little better than a great quarter-circle. The "scotia," another beautiful Greek line, is the ovolo reversed. These forms in construction variously arranged, and more or less modified, continue in use through all periods of architecture.

Students must remember at the outset the order of the various periods. First, the Classic, or more properly the Greek; then the Roman—a debased classic; after that the Romanesque, an adaption of classic to the requirements of the Christian era, a modification and pure use of classic forms, influenced by the Italian climate and the character of the Italians, as well as by the necessities of the Christian religion and its forms of worship.

Next followed a break when the art made little progress for nearly 300 years, until under Charlemagne at the end of the eighth century we find the art once more revived, but in a new form; the Romanesque has passed away, and the Latin or Norman, or round arch Gothic is being developed. The general plan and outline of the buildings is much the same, but the details are entirely different. Compare the classic constructions with those of the Gothic. In the classic you see occasional curves introduced between wide plain surfaces; rectangular members horizontally disposed seems to be the rule. In the Gothic plain surfaces are suppressed, and the general flow of line is vertical rather than horizontal. You will see how similar are the Norman mould forms to the classic; they consist of beads, fillets, and hollows intermixed with splays.

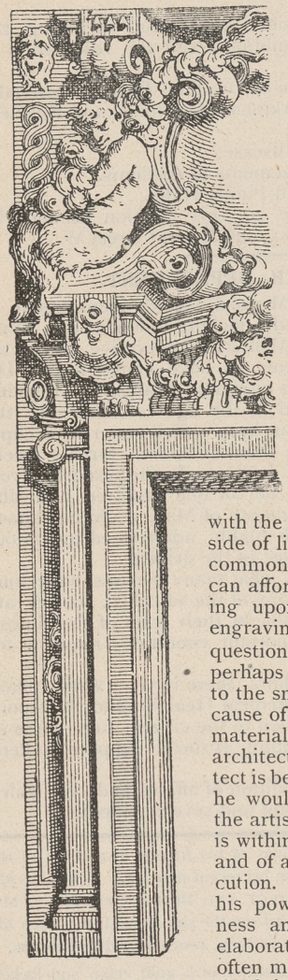
Early English mould forms consist of the "roll" or "bowtell," the "pointed roll," and the "roll and fillet," and combined with deep hollows, they form the details of the mouldings. When we find distinct additions to these, we draw the line and say another period is commenced, and this we call the Decorated, but we cannot close our eyes to the fact that the additional forms and combinations have been gradually developed from the others, and the period of their development we call "Transition"; so that while the form called the "scroll" is found occasionally in late "Early English," when we find it occur with frequency we say it belongs properly to the Decorated period. Of this second period of the Pointed Gothic are the various combinations of rolls, and fillets; also the plain and hollow chamfers, whether curved or sunk, but towards the end of the second period a very decided change of form is to be noticed; the hollows are getting more shallow, the curves more exactly parts of circles, so that another name for this period is the Geometric period. The rolls are flatter, the chamfers more general, until at last we get to a time when the mouldings are drawn in a "save trouble" fashion. They have become very flat and shallow; the members are extended, so that a single member will cover a surface which a few years before would have been divided into a dozen or more members. To this period—the Perpendicular—belong the "casement," or the sunk chamfer or hollow, widened and flattened out; rolls, often applied like shafs, but without caps or bases; the bracket or double ogee, shows as having been noticed towards the end of the Decorated period. The early form of the casement was simply a widened hollow; there are the "fillets" at each end dividing it from the "rolls," but here the "fillet" is omitted, and the casement is found ending on one side with a "roll" of very slight projection, beyond which, instead of a decent hollow that would throw up the roll, and give a contrast of shade, is the ogee, the roll or outward curve of which touches the roll so that there is neither depth nor shadow. Like other forms, the ogee has not escaped the flattening influence, and we constantly find the bracket (two ogees abutting) made use of, sometimes with a bead between, sometimes in combination with other members.

So much for mould forms. Now the evolutions of these must be noticed. There is the Greek ogee, pure and simple, and its form when with bolder treatment the curves are drawn to almost the half circle, and "quirks" are introduced to connect the ends of these full curves with the flat surfaces beyond them. There is the Early English ogee, which gives us at once the "roll," to which is added the "bead," forming "the roll and bead" mould or the "roll and under cut bead." Then a *point* is left at the angle of the stone, out of which the "roll" has been cut. This point is next seen blunted. The blunted point being a "fillet," while the "roll" has become wider, and is now struck from two centres instead of one, the junction of the curves being covered by a fillet. The "fillet" introduced here to cover the junction of these curves, it was a next step to put it between the other curves to separate the "roll" from its "hollow," and so we arrive at the "roll and triple fillet"

The enrichments of mouldings were next shown to follow the characteristics of each period, examples being shown in the diagrams. The application of these principles of mouldings to buildings for the Canadian climate was next touched upon, and it was shown how unsuitable were such forms as the hollows of Early English base moulds in which water will lie in the severe winters, and therefore what folly it is to introduce such forms simply because they are Early English. Examples of mouldings on recently erected buildings in Toronto where then shown, from which a good lesson could be learned concerning the errors designers of mouldings are likely to fall into when the principles of mouldings are not attended to.

DECORATION AND FURNITURE

THE ONTARIO SOCIETY OF ARTISTS.



WE have heard rather more than usual this year of the exhibition of pictures by the Ontario Society of Artists. The pictures have been well praised in the daily papers, after the manner of the daily papers; and the soirées given by the Society in the Gallery have brought it into additional prominence. It must not be forgotten, however, that no kind of prominence except that of excellence, and no kind of criticism except that which is sincere, will permanently help the Society to take the leading position in Canadian art which one would naturally expect from it.

It is sometimes questioned whether Art can expect to prosper in so young a country, where men are more concerned with the practical than with the aesthetic side of life, and where wealth is not so common that there are many men who can afford the luxury of hanging a painting upon their walls where a "good engraving" will do. As far as the question of wealth is concerned, it is perhaps valid for an architect to point to the small cost of his building as the cause of its poverty in design. Size and material are principal elements in noble architecture, and given these, the architect is better equipped for fine work than he would be without them. But with the artist it is different. A masterpiece is within his reach in a piece of any size and of any degree of slightness in execution. Indeed, it is far more within his power to obtain perfection in smallness and slightness than in the most elaborate production. An amateur can often make a good sketch, but he usually makes a dismal failure of a finished drawing. So that we have a right to expect from our artists that though their canvasses be small and unimportant, they shall be as far as they go successful.

As regards the question of a National School of Art—what should be its characteristics and how far our conditions of life are suitable to its existence—those are questions much more easy to answer in the next century than now. There is happily left to us much subtlety in life, and this much use for genius that we cannot estimate ourselves nor read our own environment without its aid. When the light of a genius, or of a school of geniuses is shed upon the life and landscape of Canada, we shall perhaps be surprised to find how much poetry there is in it. All life is full of it. There is even a poetry of dullness. Is not the Dutch School full of life and dear to collectors of pictures? Yet what country so flat, and what people so essentially dull and tame in their manners and surroundings. Our field for art is incomparably better than that of the Dutch painters. The question is: Are our artists getting at the life of it as well as the Dutchmen did in their time? The feeling with which one comes away from the recent exhibition is, that the Ontario Society is not getting at the life of anything. The highest ideal the artists for the most part hold before them is a drawing master's ideal. Given a scene of any kind, the aim appears to be to reproduce it in exactly the same spirit as that which animates a camera.

Some artists whose work is so good as to be worth criticism, exhibit water colours done in a good, clean way that shows they know how to handle their materials, but, if they will allow us to say so, this is mere draughtsmanship. We want more from a scene than a bare representation as like it as it can stare, with the workmanship an endeavor to repeat as it were in the artist's materials every touch of nature in the scene before him. The camera can do this for us, and only the camera can do it completely. What we ask from an artist is to give us the result of the impression which nature makes upon him. This is the reason we value Homer Watson. In his fine oil painting (No. 74 in the exhibition) one might say that not one touch finds its counterpart in nature. He has set down the result upon the spectator of the operations of nature in the scene before him. No one can convey to us the scene, not even a camera. No paper is white enough to represent light, no color could represent shade and be transparent. The details of nature are impossible, and its movements. We cannot have the scene repeated to us so as to produce its own effect. What we want from the artist is to convey that to us. And inasmuch as the artist is more of a seer than the average man, we may hope to find more in the scene when he has brought his mind to bear upon it than we should in viewing it ourselves with unskillful, careless or uninterested eyes. Now Mr. Watson, without *copying* nature in the spirit of a drawing-master, contrives in the best way he can with his own materials to represent to us the facts that give life and beauty to the scene. We can see the fineness and flexibility of the grass, ard are aware of the wind that is waving it. We trace the gradual slope of the land up to the hill, on the top of which the misty clouds are catching. We see that the clouds are moving rapidly, and also (as Mr. Watson always shows so well), that they are floating in space at a little distance above our heads and far below the upper blue. The details—the sparkling stream running away to our right, the thatched roof with its rich, soft tints, the trees throwing their branches over it, the cattle up to their bellies in the grass—are full of beauty and interest, and so selected as to give us the full spirit of the scene.

Examine close and see how all this is done. There is not a single imitative touch. Everything aims at interpretation. No camera could do this, and we may safely say no other man would do precisely the same. The scene has entered the artist's mind and he gives us the result. This is to be a poet, which one may be excused for reminding those members of the Ontario Society of Artists who have adopted the drawing master ideal, is adapted almost letter for letter from the Greek word which means "a maker." The true artist is *par excellence* a maker. It is his privilege "to throw over Nature the wedding garment or the shroud." Indeed, the poet and the artist are so much one in spirit that, in the difficulty of referring to pictures that every one knows, we may quote from the poets in illustration of the way in which a painter should inform his work with the idea of his mind. Take, for instance, the first stanza of Keats' "Saint Agnes' Eve," a poem for painters:

> "St. Agnes Eve—Ah! bitter chill it was;
> The Owl, for all his feathers, was a-cold;
> The hare limped trembling through the frozen grass,
> And silent was the flock in woolly fold;
> Numb were the beadsman's fingers while he told
> His rosary; and while his frosted breath,
> Like pious incense from a censer old,
> Seem'd taking flight for heaven without a death
> Past the Sweet Virgin's picture, while his prayer he saith."

There is a finished picture of a cold night. All speaks of the weather and the time of day. All the touches are in keeping, and the beautiful image of the beadsman's frozen breath rising as he says his prayers, is an imaginative touch in keeping with what Leigh Hunt calls the "catholic elegances" of the poem.

If a highly imaginative piece of work like this would be beyond the means of the Canadian market, let us try a quiet bit of English landscape by Tennyson:

> "Not wholly in the busy world, nor quite
> Beyond it, blooms the garden that I love.
> News from the humming city comes to it
> In sound of funeral or of marriage bells;
> And, sitting muffled in dark leaves, you hear
> The windy clanging of the minster clock;
> Although between it and the garden lies
> A league of grass, wash'd by a slow broad stream,
> That, stirr'd with languid pulses of the oar,
> Waves all its lilies, and creeps on
> Barge-laden, to three arches of a bridge
> Crown'd with the minster towers."

This gives us all the facts necessary to convey to us the character and the beauty of the scene. We know the extent of the landscape, the sort of country, the time of year. We get the color with a perception of how its brightness is enhanced by the dark embowered foreground; and what can be more charming than the composition—the sluggish weedy stream, full up to the level of the flat green meadows through which it winds in perspective, ending three miles away with the lovely central motive of the three arched bridge crowned with the minster towers. This, though so complete a picture, is by no means an inventory of the scene. The details, though full, are not divergent, each adds something to the essential character and the quiet beauty of the scene. Would that the skill which some members af the Ontario Society spend in giving us colored photographs could be directed with a little more discrimination so as to affect our imagination in the same way.

There is one more word to be said about the pleasure which we receive from the mere execution of imaginative art. To return for a moment to the poets—here is a sketch by Tennyson:

> THE EAGLE.
> He clasps the crag with hooked hands;
> Close to the sun in lonely lands,
> Ring'd with the azure world, he stands.
> *The wrinkled sea beneath him crawls;*
> He watches from his mountain walls,
> And like a thunderbolt he falls.

Scientifically speaking, the poet has no right to apply either the word "wrinkled" or "crawled" to the sea; the sea does not crawl, and, as applied to the conformation of a wave, the word wrinkle is not a true description. But anyone who has seen the sea from a great height on a fine day, will accept this account of the appearance of things and enjoy the bold metaphor which brings it before us so exactly, putting us by these two words, without further description, in the lofty position of the eagle. In other words, the more mind is brought to bear on the study

of nature, the more the tendency is to render it in terms other than imitative, and the more pleasure we take in the rendering. This, as well as the fact that he renders with more truth and beauty than any other men the real life of a scene—the grace of foliage, the varied slopes of the ground, the brightness of light, and the transparency of shade, and gives us color and composition to delight the eye—is one great reason why we take so much pleasure in the work of Fowler. Without a word of gratitude for Fowler, a criticism of Art in Ontario would not be complete ; but it is not our purpose to deal with individuals at all on this occasion ; otherwise, we might praise as well as criticize. But the Society has had from the enthusiastic daily papers as much glory as it needs, and our business is to point out with a fair mind and in a public spirit, the intrinsic lack of value in most of the productions. We name no names in dispraise. We do not wish to disturb any "vested interests." But if any artist who finds in our remarks an application to himself will take the hint, we think he will find it pay ; for it is worth while in conclusion to remark, in vindication of the support that the Canadian public is able and willing to give to art, that any real work of art always sells, and usually without delay.

It was gratifying to see in the small room devoted to the Architectural Sketch Club so much promising work. The Club is now well established, and we hope the membership is full ; for the Club, and the association which it brings about among students, will probably be of more value to them and to the future of architecture in Ontario than can be adequately estimated now.

The effects obtained by Composite Colors, or rather by this method of staining, are much like the effect of watered silk, looking, perhaps, green in some positions, and then changing into brown or red in another light. One of the oldest of the eastern architects declared that no advance in exterior coloring equal to the introduction of exterior staining, over a decade ago on the discovery of the Creosote stains, has been made in the last fifty years. This new discovery made by the Creosote people bids fair to make as great a revolution as the original one.

Architects and builders who are not too conservative to test the merits of a new material, should read what is said in Mr. Harald M. Hansen's advertisement regarding his patent chimney topping, and should ask for specimens of the material for examination. This material is indestructible by the action of weather, being shaped for shedding off water, and manufactured from similar clay in the same manner as first-class salt-glazed sewer pipe. In the city, of Chicago this topping is becoming a fixed item in architects' specifications, replacing the ordinary common brick corbelling, cornicing, etc., as well as for better work when design permits.

ARCHITECTURE IN RELATION TO HYGIENE.

THE Seventh International Congress of Hygiene and Demography is announced to take place in London, Eng., from the 10th to the 17th of August next. The meetings of Section VI, which is to consider the subject of "Architecture in Relation to Hygiene," will be held in Burlington House, Picadilly, on the 11th, 12th, 13th and 14th of August. Under the heading mentioned the Section will discuss :

1.—Laying out and Extensions of Towns, including the control of the construction of Buildings, and the reservation of open Spaces.

2.—Planning and construction of Dwelling Houses, especially Common Lodging Houses, Workmen's Dwellings and Residential Flats.

3.—Hospitals for Infectious Diseases.

4.—Constructions and Arrangements of Asylums.

5.—Sanitation of Theatres and Public Halls.

All communications relative to this Section should be addressed to Ernest Turner, Esq., 246 Regent street W.

TORONTO HEALTH DEPARTMENT.

FOR several years past the Medical Health Department of the city of Toronto has been sadly lacking in efficiency. With the recent appointment of Dr. Allen as its executive officer, an improved order of things seems to have commenced. Dr. Allen has already shown by his energetic manner of attacking abuses that he does not regard in the light of a sinecure the important position which he has been called upon to occupy. The citizens have reason to be thankful to him for his recent report on the quality of the milk supply. As the result of investigation he finds that only ten out of one hundred and fifty samples examined during the month of May, could be classed as good. Skim milk and milk highly adulterated by various methods is being supplied by most of the dealers.

Dr. Allen has discovered also, what many persons have long suspected was the fact, that many of the so-called dairies are unworthy of the name by reason of their want of cleanliness, proper ventilation, and other important conditions requisite for insuring the purity of the milk.

Bad as is this condition of affairs, there is yet a worse phase of the subject presented in the Medical Health Officer's report, namely, that milk is being supplied to the citizens from cows so afflicted with disease as to require artificial supports to keep them on their feet.

This is truly an alarming condition of affairs and one which demands the application of prompt and severe remedies.

PERSONAL.

Mr. Haskins, City Engineer of Hamilton, Ont., was recently elected a member of the British Institute of Civil Engineers.

Mr. Chas. Sproatt, formerly city engineer of Toronto, has been suffering for more than a year past from ill-health. On the advice of his physicians he recently resigned his position with the city, and will endeavor to regain his physical vigor. It is the wish of his many friends that he may succeed.

Messrs. Smith & Gemmell and E. B. Jarvis form a new architectural firm in Toronto under the name of Smith, Gemmell & Jarvis. The firm are fitting up a handsome suite of offices in the Bank of Commerce building. Mr. Gemmell has lately returned from a three months visit to England, Scotland, France and Italy.

Mr. Frank Wickson, of the firm of Dick & Wickson, architects, Toronto, is receiving the congratulations of his friends in and out of the profession on his recent marriage. The CANADIAN ARCHITECT AND BUILDER extends to Mr. and Mrs. Wickson the sincere wish that their life journey may be long, peaceful and prosperous.

The presentation of a gold chain and locket, the latter suitably engraved, was the method adopted by the employees of Mr. W. B. Malcolm's plumbing supply establishment, Toronto, to mark their appreciation of Mr. W. J. Forrester, on his retirement from the position of manager to engage in business on his own account in the United States. Mr. Forrester is very popular with all who enjoy the pleasure of his acquaintance, and their best wishes will attend him in his new circumstances.

The corner stone of a new hospital building was laid at Chatham a few days ago in the presence of 10,000 people.